

CONTENTS

Volume 24, Issue Nos. 1–13

EARTH SURFACE PROCESSES AND LANDFORMS

Issue No. 1, JANUARY

Controls on Suspended-Sediment Transfer at a High-Arctic Glacier, Determined from Statistical Modelling: R. Hodgkins	1
Soil Redistribution and Pedologic Transformations in Coastal Plain Croplands: J. D. Phillips, H. Golden, K. Cappiella, B. Andrews, T. Middleton, D. Downer, D. Kelli and L. Padrick	23
Assessment of Micro-Aggregation using Laser Diffractometry: L. Beuselinck, G. Govers and J. Poesen	41
TECHNICAL COMMUNICATIONS	
Effective Application of Automated Digital Photogrammetry for Geomorphological Research: J. Chandler	51
Horizontal Water Trap for Measurement of Aeolian Sand Transport: P. Wang and N. C. Kraus	65
Segmentation of Soil Roughness Profiles: L. Borselli	71

Issue No. 2, FEBRUARY

Lateglacial River Sediment Budgets in the Maas Valley, The Netherlands: M. Huisink	93
Clast Exposure on Boulder-Covered Desert Slopes: D. L. Higgitt and R. J. Allison	111
Vegetation Controls on Channel Stability in the Bell River, Eastern Cape, South Africa: K. M. Rowntree and E. S. J. Dollar	127
Bench Development Along the Regulated, Lower River Dee, UK: S. Changxing, G. Petts and A. Gurnell	135
Soil Creep: Problems Raised by a 23 Year Study in Australia: M. F. Clarke, M. A. J. Williams and T. Stokes	151
Sedimentation Processes and Facies on a Semi-Vegetated Talus, Lousteau, Southwestern France: P. Bertran and J.-P. Texier	177
Erratum	188
Forthcoming Papers	189

Issue No. 3, MARCH

Salt Weathering: Influence of Evaporation Rate, Supersaturation and Crystallization Pattern: C. Rodriguez-Navarro and E. Doehne	191
A Preliminary Investigation of the Integration of Modelled Floodplain Hydraulics with Estimates of Overbank Floodplain Sedimentation derived from Pb-210 and Cs-137 Measurements: G. B. Siggers, P. D. Bates, M. G. Anderson, D. E. Walling and Q. He	211

Roughness Coefficients and Velocity Estimation in Well-Inundated Sheet and Rilled Overland Flow Without Strongly Eroding Bed Forms: H. Rouhipour, C. W. Rose, B. Yu and H. Ghadiri	233
Field Observations on Hyperconcentrated Flows in Mountain Torrents: R. J. Batalla, C. de Jong, P. Ergenzinger and M. Sala	247
Aeolian Processes across Transverse Dunes. I: Modelling the Air Flow: J. H. van Boxel, S. M. Arens and P. M. van Dijk	255
Chemical Weathering Associated with Tafonei at Papago Park, Central Arizona: S. W. Campbell	271
Book Reviews	279
Forthcoming Papers	281

Issue No. 4, APRIL

Application of AVHRR to Monitoring A Climatically Sensitive Playa Case Study. Chott el Djerid, Southern Tunisia: R. G. Bryant	283
Distribution of Glaciofluvial Sediment within and on the Surface of a High Arctic Valley Glacier: Marthabreen, Svalbard: N. F. Glasser, M. R. Bennett and D. Huddart	303
Aeolian Processes across Transverse Dunes. II: Modelling the Sediment Transport and Profile Development: P. M. van Dijk, S. M. Arens and J. H. van Boxel	319
Alongshore Variation in Beach Cusp Morphology in a Coastal Embayment: G. Masselink	335
Gravel Dispersion on a Granite Pediment (East Mojave Desert, California): A Short-Term Look at Erosional Processes: S. B. Edinger-Marshall and L. J. Lund	349
SHORT COMMUNICATIONS	
Time-Averaged Flow Structure in the Central Region of a Stream Confluence: A Discussion: S. N. Lane, K. F. Bradbrook, K. S. Richards, P. M. Biron and A. G. Roy	361
On Secondary Circulation, Helical Motion, and Rozovskii-Based Analysis of Time-Averaged Two-Dimensional Velocity Fields at Confluences: B. L. Rhoads and S. T. Kenworthy	369
Book Reviews	377
Forthcoming Papers	380

Issue No. 5, MAY

Special Issue: Aeolian Sand Transport Processes Guest Editor: I. Livingstone

Editorial: Aeolian Sand Transport Processes: I. Livingstone	381
A Conceptual Model of Wind Erosion of Soil Surfaces by Saltating Particles: M. A. Rice, I. K. McEwan and C. E. Mullins	383
Near-bed Mass Flux Profiles in Aeolian Sand Transport: High-resolution Measurements in a Wind Tunnel: G. R. Butterfield	393
Aeolian Mass Transport Near the Saltation Threshold: K. R. Rasmussen and M. Sørensen	413
Sand Transport and Deposition Within Arrays of Non-erodible Cylindrical Elements: J. M. Al-Awadhi and B. B. Willetts	423

Secondary Airflow and Sediment Transport in the Lee of a Reversing Dune: I. J. Walker . . .	437
Size Distributions of Saltating Grains: An Important Variable in the Production of Suspended Particles: D. A. Gillette and W. Chen	449
Optical Depth, Size Distribution and Flux of Dust from Owens Lake, California: T. C. Niemeyer, D. A. Gillette, J. J. DeLuise, Y. J. Kim, W. F. Niemeyer, T. Ley, T. E. Gill and D. Ono	463
Forthcoming Papers	480

Issue No. 6, JUNE

Slopewash, Surface Runoff, and Fine-Litter Transport in Forest and Landslide Scars in Humid-Tropical Steeplands, Luquillo Experimental Forest, Puerto Rico: M. C. Larsen, A. J. Torres-Sánchez and I. M. Concepción	481
Sediment Transport Capacity and Erosion Processes: Model Concepts and Reality: C. Huang, L. K. Wells and L. D. Norton	503
Shoreline Evolution of the Holland Coast on a Decadal Scale: J. Guillén, M. J. F. Stive and M. Capobianco	517
TECHNICAL COMMUNICATIONS	
Verification of Landslide Susceptibility Mapping: A Case Study: C. Irigaray Fernández, T. del Castillo, R. El Hamdouni and J. Chacón Montero	537
Measurement of Simulated Drop Size Distribution with an Optical Spectro Pluviometer: Sample Size Considerations: C. Salles, J. Poesen and L. Borselli	545
A Cross-Scale Comparison of Drainage Basin Characteristics Derived from Digital Elevation Models: Z. Yin and X. Wang	557
SHORT COMMUNICATIONS	
Discussion on 'The European Soil Erosion Model (EUROSEM): A Dynamic Approach for Predicting Sediment Transport from Fields and Small Catchments': P. I. A. Kinnell	563
Reply to Discussion on 'The European Soil Erosion Model (EUROSEM): A Dynamic Approach for Predicting Sediment Transport from Fields and Small Catchments': R. P. C. Morgan, J. N. Quinton, R. E. Smith, G. Govers, J. W. A. Poesen, K. Auerswald, G. Chisci, D. Torri and M. E. Styczen	567
Book Review	569
Forthcoming Papers	570

Issue No. 7, JULY

Distribution of Organic Carbon in Bed Sediments of Manoa Stream, Oahu, Hawaii: R. A. Sutherland	571
Gully-Head Morphology and Implications for Gully Development on Abandoned Fields in a Semi-Arid Environment, Sierra de Gata, Southeast Spain: D. J. Oostwoud Wijdenes, J. Poesen, L. Vandekerckhove, J. Nachtergaele and J. De Baerdemaeker	585
Rock Coast Inheritance: An Example from Galicia, Northwestern Spain: A. S. Trenhaile, A. Pérez Alberti, A. Martínez Cortizas, M. Costa Casais and R. Blanco Chao	605

The Transport of Gravel in an Ephemeral Sandbed River: M. A. Hassan, A. P. Schick and P. A. Shaw	623
Modelling Alluvial Fan Morphology: L. J. De Chant, P. P. Pease and V. P. Tchakerian	641
Mountain Ordering: A Method for Classifying Mountains based on their Morphometry: S. Yamada	653
Book Reviews	661
Forthcoming Papers	663

Issue No. 8, AUGUST

Resistance to Shallow Landslide Failure through Root-Derived Cohesion in East Coast Hill Country Soils, North Island, New Zealand: N. J. Preston and M. J. Crozier	665
Soil Erosion by Surface Water Flow on a Stony, Semiarid Hillslope: M. A. Nearing, J. R. Simanton, L. D. Norton, S. J. Bulygin and J. Stone	677
Spatial Distribution of Human Geomorphic Activity in the United States: Comparison with Rivers: R. Hooke	687
Assessment of Soil Losses by Ephemeral Gully Erosion using High-Altitude (Stereo) Aerial Photographs: J. Nachtergaele and J. Poesen	693
The Effects of Fire on Rock Weathering: Some Further Considerations of Laboratory Experimental Simulation: R. J. Allison and G. E. Bristow	707
Experimental Salt Weathering of Limestones in Relation to Rock Properties: A. S. Goudie	715
An Investigation into the Efficiency of Particle Size Separation using Stokes' Law: J. Clifton, P. McDonald, A. Plater and F. Oldfield	725
Distribution Patterns of Gypsum and Kalistrontite in a Dry Lake Basin of the Southwestern Kalahari (Omongwa Pan, Namibia): F. Mees	731
Sediment Dynamics in the Castleton Karst, Derbyshire, UK: S. Bottrell, P. Hardwick and J. Gunn	745
Book Review	761
Forthcoming Papers	762

Issue No. 9, AUGUST

Comparison of Slope Estimates from Low Resolution DEMs: Scaling Issues and a Fractal Method for their Solution: X. Zhang, N. A. Drake, J. Wainwright and M. Mulligan	763
The Distribution of Solute Processes on an Acid Hillslope and the Delivery of Solutes to a Stream: I. Exchangeable Bases: T. P. Burt and S. J. Park	781
Effect of Drainage Area on Hypsometry from an Analysis of Small-Scale Drainage Basins in the Siwalik Hills (Central Nepal): J. E. Hurtrez, C. Sol and F. Lucazeau	799
Drainage Density on Progressively Tilted Surfaces with Different Gradients, Wheeler Ridge, California: P. J. Talling and M. J. Sowter	809

Prediction of Rainfall-Triggered Landslides: A Test of the Antecedent Water Status Model: M. J. Crozier	825
A Worldwide Correlation for Exponential Bed Particle Size Variation in Subaerial Aqueous Flows: P. H. Morris and D. J. Williams	835
Book Review	849
Forthcoming Papers	850

Issue No. 10, SEPTEMBER

The Distribution of Solute Processes on an Acid Hillslope and the Delivery of Solutes to a Stream: II. Exchangeable Al^{3+} : S. J. Park and T. P. Burt	851
Worldwide Correlations for Subaerial Aqueous Flows with Exponential Longitudinal Profiles: P. H. Morris and D. J. Williams	867
Influence of Storm-Related Sediment Storage on the Sediment Delivery from Tributary Catchments in the Upper Waipaoa River, New Zealand: T. Marutani; M. Kasai, L. M. Reid and N. A. Trustrum	881
Gravel Sediment Routing from Widespread, Low-Intensity Landscape Disturbance, Current River Basin, Missouri: R. B. Jacobson and K. B. Gran	897
Genesis and Evolution of Gypsum Tumuli: J. M. Calaforra and A. Pulido-Bosch	919
Relationships between Tectonic and Geomorphological Linear Features in the Guadix-Baza Basin, Southern Spain: M. Heddi, D. J. Eastaff and J. Petch	931
A Two-Parameter Weibull Function to Describe Airborne Dust Particle Size Distributions: T. M. Zobeck, T. E. Gill and T. W. Popham	943
Forthcoming Papers	956

Issue No. 11, OCTOBER

Fluvial Suspended Sediment Transport from Cold and Warm-Based Glaciers in Svalbard: A. J. Hodson and R. I. Ferguson	957
Problems of Core Correlation, Sediment Source Ascription and Yield Estimation in Ponsonby Tarn, West Cumbria, UK: F. Oldfield, P. G. Appleby and K. D. Van der Post	975
Evaluation of the Simple Settling Theory for Predicting Sediment Deposition by Overland Flow: L. Beuselinck, G. Govers, A. Steegen, P. B. Hairsine and J. Poesen	993
Spatial Variability of Soils Developing on Basalt Flows in the Potrillo Volcanic Field, Southern New Mexico: Prelude to a Chronosequence Study: M. C. Eppes and J. B. J. Harrison	1009
Field and Computer Simulation Experiments on the Formation of Desert Pavement: J. Wainwright, A. J. Parsons and A. D. Abrahams	1025
The Role of Debris Supply Conditions in Predicting Debris Flow Activity: M. J. Bovis and M. Jakob	1039
Forthcoming Papers	1055

Issue No. 12, NOVEMBER

Editorial: Changing Times—Changing Rivers: C. R. Thorne, P. Billi and M. Rinaldi	1057
Deposition and Storage of Fine-grained Sediment within the Main Channel System of the River Tweed, Scotland: P. N. Owens, D. E. Walling and G. J. L. Leeks	1061
Sediment Yield Variability in the Upper Yangtze, China: X. Lu and D. L. Higgitt	1077
Pore Water Pressure and Streambank Stability: Results from a Monitoring Site on the Sieve River, Italy: N. Casagli, M. Rinaldi, A. Gargini and A. Curini	1095
Geomorphological Map of the Po Plain, Italy, at a Scale of 1:250 000: G. B. Castiglioni, A. Biancotti, M. Bondesan, G. C. Cortemiglia, C. Elmi, V. Favero, G. Gasperi, G. Marchetti, G. Orombelli, G. B. Pellegrini and C. Tellini	1115
Solute Transport as an Indicator of Morphodynamic Zonation in a Postglacial Environment, West Pomerania, Poland: M. Mazurek	1121
Channel Changes due to River Regulation: The Case of the Piave River, Italy: N. Surian	1135
Temporal and Spatial Variability in Thalweg Profiles of a Gravel-bed River: M. A. Madej	1153
Forthcoming Papers	1170
Volume Contents	iii

Issue No. 13, DECEMBER

Editorial: M. Kirkby	1171
A Two-Dimensional Model for Suspended Sediment Transport in the Southern Branch of the Rhine-Meuse Estuary (The Netherlands): M. van Wijngaarden	1173
Solute Generation and Transfer from a Chemically Reactive Alpine Glacial-Proglacial System: I. J. Fairchild, J. A. Killawee, M. J. Sharp, B. Spiro, B. Hubbard, R. D. Lorrain and J.-L. Tison	1189
Paraglacial Modification of Slope Form: A. M. Curry	1213
The Shapes of Some Mountain Peaks in the Canadian Rockies: D. M. Cruden and X.-Q. Hu	1229
Soil Erosion at Three Experimental Sites in the Mediterranean: A. Romero-Díaz, L. H. Cammeraat, A. Vacca and C. Kosmas	1243
SHORT COMMUNICATION	
A Note on Sand Ripples Developing in Sandstone Rock Seepages of the Weald, U.K.: A. Pentecost	1257
Book Review	1261
Forthcoming Papers	1262
Author Index	1263
Keyword Index	1265

